PHILIPS

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Color TV

Quick Use and Hookup Guide

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IMPORTANT

NOTE: This owner's manual is used with several different television models. Not all features (and drawings) discussed in this manual will necessarily match those found with your television set. This is normal and does not require that you contact your dealer or request service.

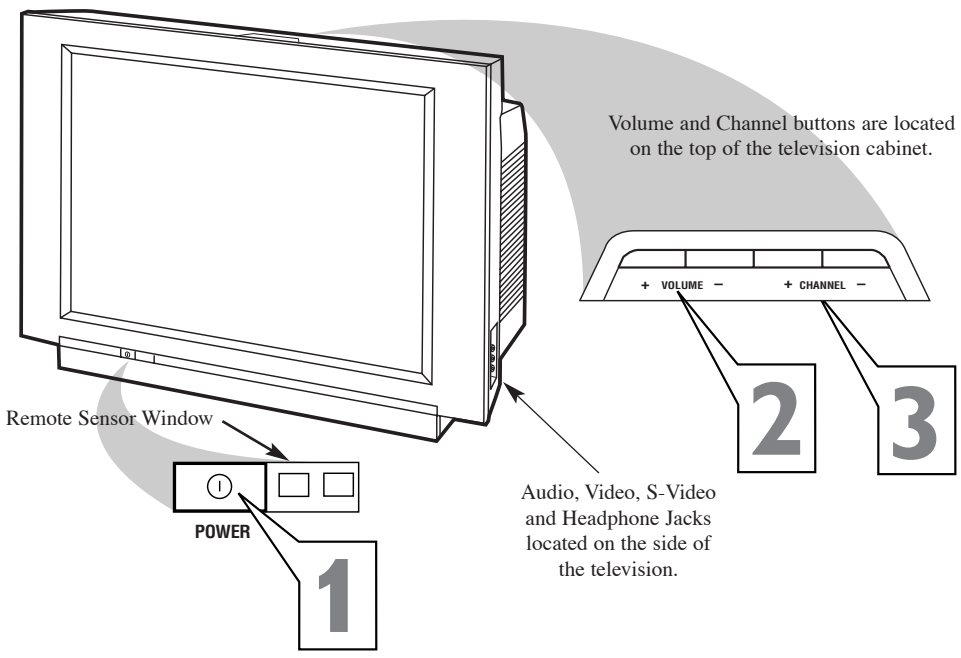
WARNING: TO PREVENT FIRE OR SHOCK HAZARD DO NOT EXPOSE THIS UNIT TO RAIN OR EXCESSIVE MOISTURE.

Basic TV Operation

Your television has a set of controls located on the top and front of the cabinet for use when the remote control is not needed.

1. **Press the POWER button** on the front of the TV cabinet to turn the TV ON.
   Note: With AutoChron ON, the TV will search for a PBS channel to set the clock before powering itself on. This can take several seconds.
2. **Press the VOLUME + button** to increase the sound level **or the VOLUME – button** to lower the sound level.
   Pressing both buttons at the same time will display the onscreen menu. After you are in the menu, use these buttons to make adjustments or selections.
3. **Press the CHANNEL + or – button** to select TV channels. Use these buttons to make adjustments or selections in the onscreen menu.

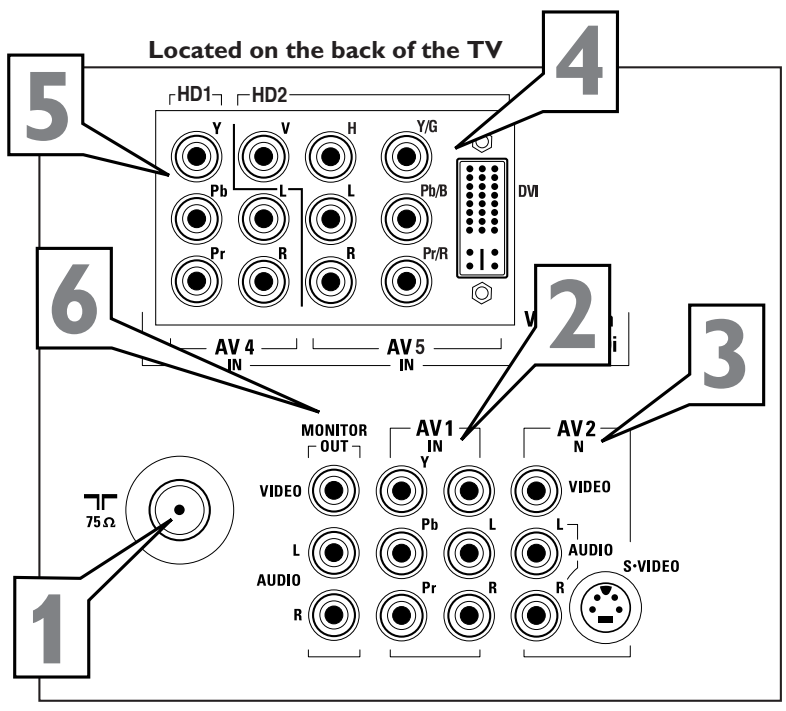
There is also a set of Audio and Video Input jacks located on the side of the television cabinet. Refer to the Side AV3 Input section on page 6 of this *Quick Use and Hookup Guide*.

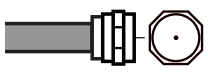

Volume and Channel buttons are located on the top of the television cabinet.
+ VOLUME –
+ CHANNEL –
2
3
Remote Sensor Window
POWER
1
Audio, Video, S-Video and Headphone Jacks located on the side of the television.

Jack Panel Descriptions and Required Cables

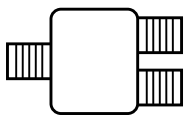
The television is equipped with external input and output jacks for use with optional accessory devices such as Home entertainment Receivers, VCRs, DVD Player, Gaming Units, Video Cameras, etc.

1. **75Ω RF -** Cable/Antenna Input connection jack.
2. **AV 1 IN -** Audio/Video connection jacks including Component Video Inputs.
3. **AV 2 IN -** Audio/Video Input connection jacks including S-Video connections.
4. **AV 5 IN -** High Definition 1080i or 480p Video, DVI (Digital Video Input), Audio Inputs, Horizontal and Vertical Sync connection jacks.
5. **AV 4 IN -** High Definition 1080i or 480p Video and Audio Input connection jacks.
6. **Monitor Out -** Audio/Video Output connection jacks (TV tuner signal only).
7. **SIDE (AV 3) -** Audio/Video Input jacks include a S-Video jack, plus a Headphone jack located on the side of the cabinet.

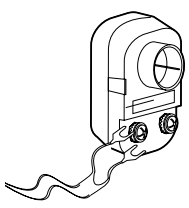




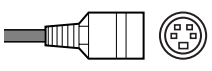
A 75-ohm **coaxial cable** connects signals from an antenna or a cable TV company to the antenna jack on the back of the TV. Coaxial cables use "F" connectors.



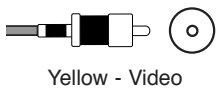
A **two-way signal splitter** enables you to take a single antenna or cable TV signal and supply it to two different inputs.



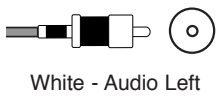
A **300- to 75-ohm twin-lead adapter** accepts the antenna cables (called twin-lead wires) from an antenna, allowing you to connect the antenna signal to the TV.



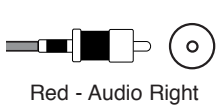
A **S-Video cable** provides better picture performance than regular (composite) video connections.
S-Video cables can be used only with S-Video-compatible accessory devices. You must also connect the left and right audio cables to the AV 2 Audio in jacks because the S-Video jack carries only the picture signal, not the sound.



Yellow - Video



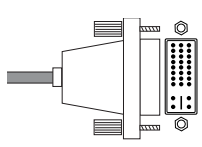
White - Audio Left



Red - Audio Right

Video and audio cables with standard RCA (phono) connectors connect the video and audio jacks of accessory devices such as VCRs and DVD players to the jacks on the TV.

These connectors are usually color coded. The jacks on your TV are also color coded to match the colors of the connectors. Yellow for video (composite) and Red and White for the right and left audio channels. The video cables used to connect component video or RGB (high-resolution) jacks are color coded red, green, and blue.



A **DVI (Digital Video) cable** that will support digital connection from a PC. Only Single Digital Link DVI is supported for PCs with 480p or 1080i output.

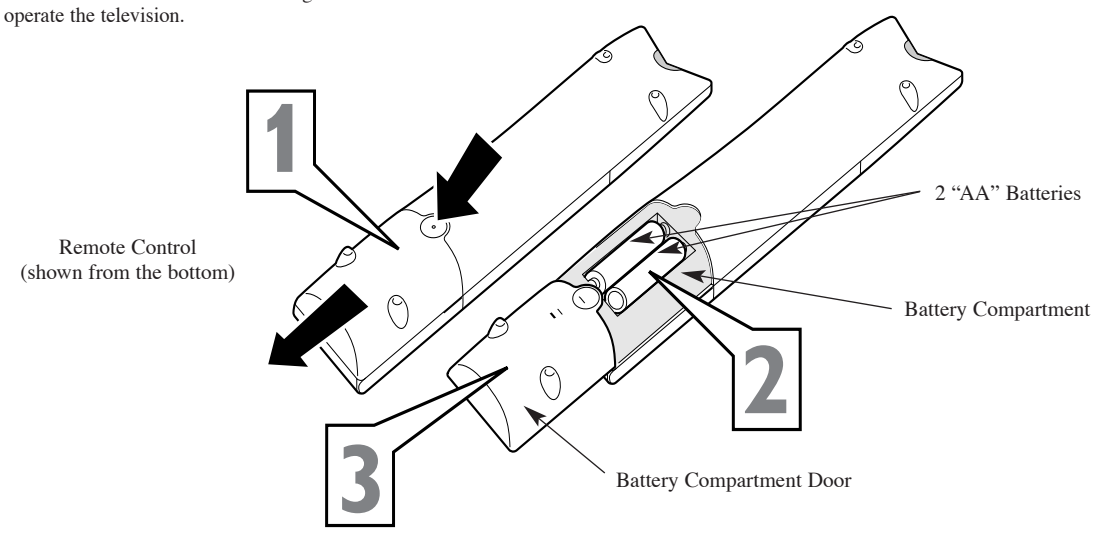
Basic Remote Control Operation

Remote Control Batteries

To load the supplied batteries into the remote:

1. **Remove the battery compartment door** on the back of the remote.
2. **Place the batteries (2-AA) in the remote**. Be sure the (+) and (–) ends of the batteries line up correctly (the inside of the case is marked).
3. **Reattach the battery compartment door**.

Be sure to point the remote at the Remote Sensor window on the front of the television when using the remote control to operate the television.



Remote Control Buttons

VCR control buttons - Press to pause, rewind, stop, play, or fast forward a videotape.

TV • VCR • ACC - (Mode buttons) Press to send remote signals to either the TV, VCRs, or other accessory devices such as cable TV converters, satellite receivers, DVDs, or laser disc players. (You may need to program the remote to work accessory devices. Refer the *Directions for Use* manual.

PIP buttons: SWAP, PIP CH DN/UP, FREEZE - Press to operate the Picture-in-Picture (PIP) features.

Sound - Press to select an AutoSound™ control. Choose from three factory-set controls—Voice, Music, and Theatre—and a Personal control that you set according to your own preferences through the onscreen Sound menu. The three factory-set controls will tailor the TV sound so as to enhance the type of program you are watching.

Status/Exit - Pressing the button once shows the current channel number, name (if set), time (if set), Sleep Timer setting, and sound setting (stereo, mono, SAP, or mute). Pressing the button twice shows the current AutoLock™ settings. Pressing the button once when an onscreen display is showing removes the onscreen display.

Cursor Ring - Up/Down: allows you to select the next or previous menu item in the menu. Left/Right: allows you to access the submenus and adjust the settings. When no onscreen displays or menus are present, use the Cursor Ring Left/Right to select a picture format for a video source connected to the ANTENNA, AV1, CVI, AV2, or AV3 (side panel inputs) on the TV.

Volume (+/–) - Press to adjust the TV sound level.

Number Buttons - Press to select TV channels. When selecting single-digit channels, press the number of the desired channel. The TV will pause for a few seconds and then tune to the selected channel.

TV/VCR - Press while in VCR mode to view the playback of a videotape. Press again to return to TV mode.

A/CH - When in the TV mode, press to alternate between the currently viewed channel and the previously viewed channel.

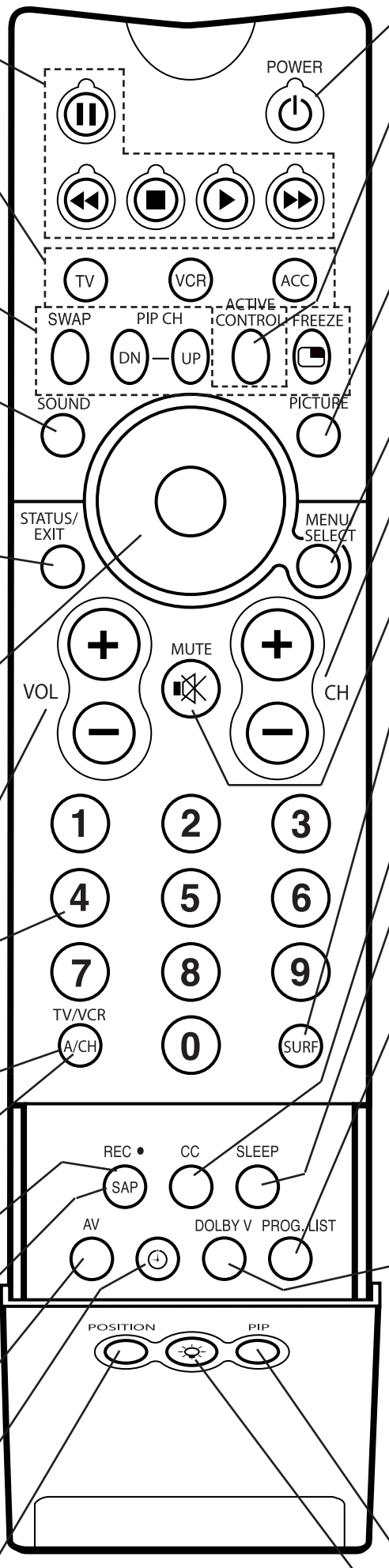
Rec ● - Press this button simultaneously with the ► button when in VCR mode to record.

SAP - When in the TV mode, press to select between main sound and SAP (Second Audio Program) when you tune to a program offering SAP.

AV - Press repeatedly to select the different signal sources connected to the TV: TV (current channel), AV1, CVI, AV2, AV3 (side jack panel), AV4 and AV5.

Clock - Press to access the onscreen Timer menu, where you can set the time for the TV's clock or set the TV's Timer features, such as channel switch over, power on set, and power off set.

Position - Press to move the PIP picture to any of the four corners of the screen.



Power - Press to turn the TV on or off.

Active Control™ - Measures and corrects all incoming signals to provide the best picture-quality settings. Press to turn Active Control™ on or off. When Active Control™ is on, it automatically and continuously controls Sharpness and Noise Reduction settings.

Picture - Press to select an AutoPicture™ control. Choose from four factory-set controls—Movies, Sports, Weak Signal, and Multimedia—and a PERSONAL control that you set according to your own preferences through the onscreen Picture menu.

Menu/Select - Press to display the onscreen menu. Press to return to a higher menu level.

Channel (+/–) - Press to select channels in ascending or descending order or cycle through the signal inputs.

Mute - Press to turn the TV sound off. To restore the sound to its previous level, press the button again.

Surf - Press to select previously entered channels. With the TV's AutoSurf™ control, you can place up to 10 favorite channels or sources in memory. Then by pressing the Surf button, you can quickly view the selected channels.

CC Button - Press to select Closed Captioning options within the menu.

Sleep - Press to set the TV to automatically turn itself off after a period of time. Choose 15, 30, 45, 60, 90, 120, 180, or 240 minutes before the TV will automatically turn off.

Program List - Press to display a list of channel numbers and their names. Each channel will appear as a selectable menu item. The current channel will be highlighted as default. Five channels will be listed on screen at one time. Press the Cursor Ring up or down to scroll the list and and highlight a channel. Press the Cursor Ring right to tune to the highlighted channel. Channels marked "Skipped" in the Channel Edit control will not appear in the list. Each channel that is being blocked by AutoLock™ will appear with a padlock icon to indicate that the channel is not viewable.

Dolby V - Press to select various factory surround sound listening modes.

Dolby* Virtual (Virtual Dolby Surround) (with Virtual Dolby Surround signals) - Dolby Virtual uses two speakers to simulate the surround effect produced by a multichannel system.

Incredible Surround™ - In **Stereo** sound mode—when Incredible Surround™ is turned on—it seems as though the loudspeakers are spread farther apart from each another. In **Mono** sound mode—when Incredible Surround™ is turned on—enables you to hear a spatial sound effect.

PIP - Press to turn PIP (picture-in-picture) on or off or control the size of the PIP window.

Back Light button - Press to light the buttons on the remote control.

Hooking Up the Television

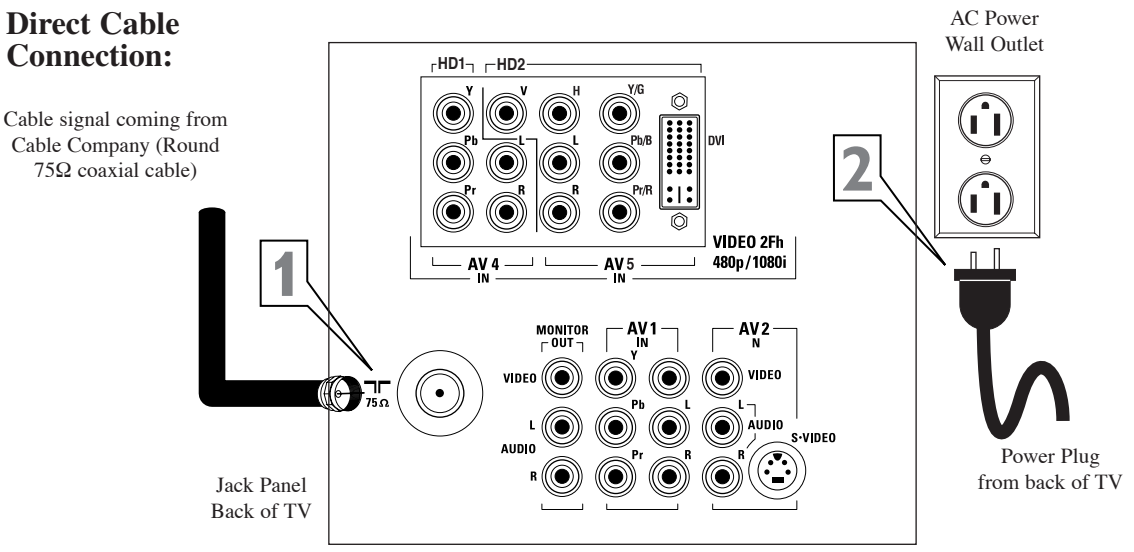
Direct Cable TV Input

Your Cable TV input into your home may be a single (75 ohm) cable or a converter box installation. In either case, the connection to the TV is very easy. Follow the steps below to connect your cable signal to your new television.

If your cable signal comes directly from a round 75Ω coaxial cable use the following steps:

1. **Connect the open end of the round Cable Company supplied cable** to the 75Ω input on the TV. Screw it down finger tight.
2. **Plug the television into the wall outlet** and turn the TV on. Refer to the AUTOPROGRAM feature to program all the available channels on your cable signal.

Direct Cable Connection:

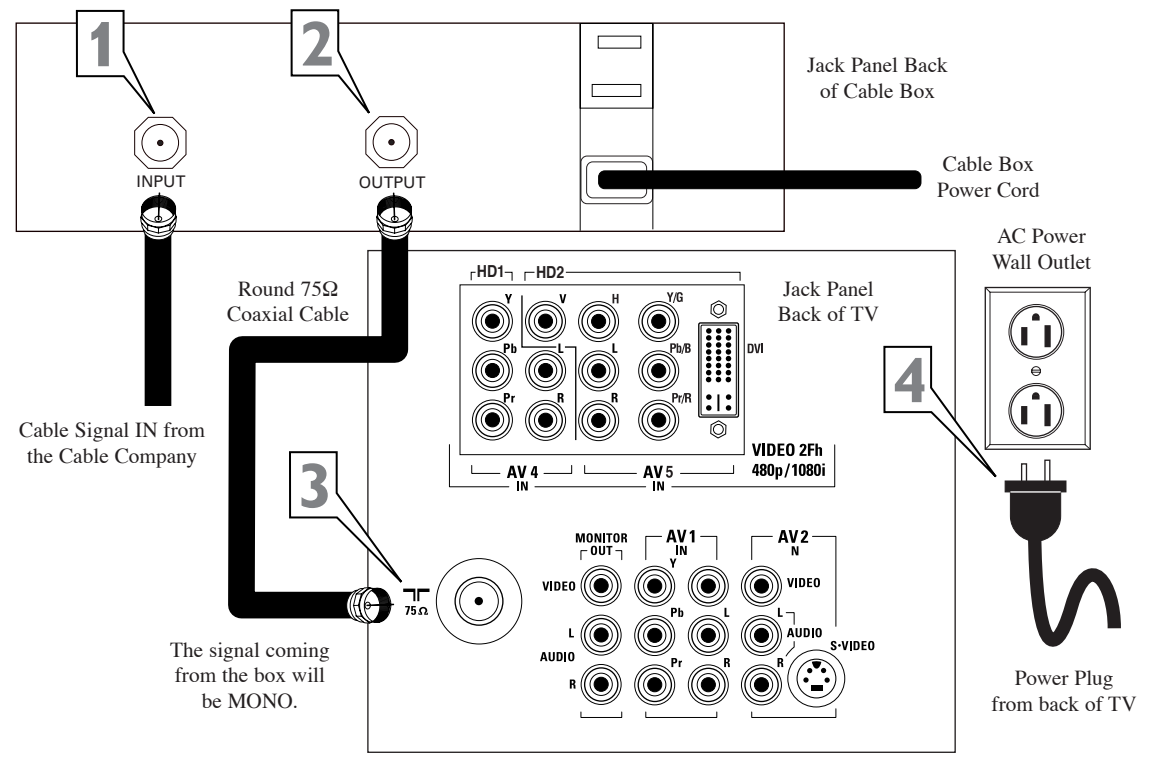


Cable TV Box Input

If your cable signal comes from a cable box, use the following steps: (This connection will be mono. Some Cable boxes use Left and Right channel audio output jacks for stereo connections. This type of Cable Box can be connected to the AV1 or AV2 Audio Left and Right Audio Inputs. Please refer to your Cable Box instructions.)

1. **Connect the open end of the round Cable Company supplied cable** to the cable signal IN(put) plug on the back of the Cable Box.
2. Using a separate round coaxial cable, **connect one end to the OUT(put) plug on the back of the Cable Box.**
3. **Connect the other end of the round coaxial cable** to the 75Ω input on the back of the television. Screw it down finger tight.
4. **Plug the television into the wall outlet** and turn the TV on. Refer to the TUNER and AUTOPROGRAM features on page 4 of this Quick Use Guide. TUNER should be set to the CABLE option. AUTOPROGRAM can be set to program all the available channels on your cable signal into the television's memory.

Cable Box Connection:

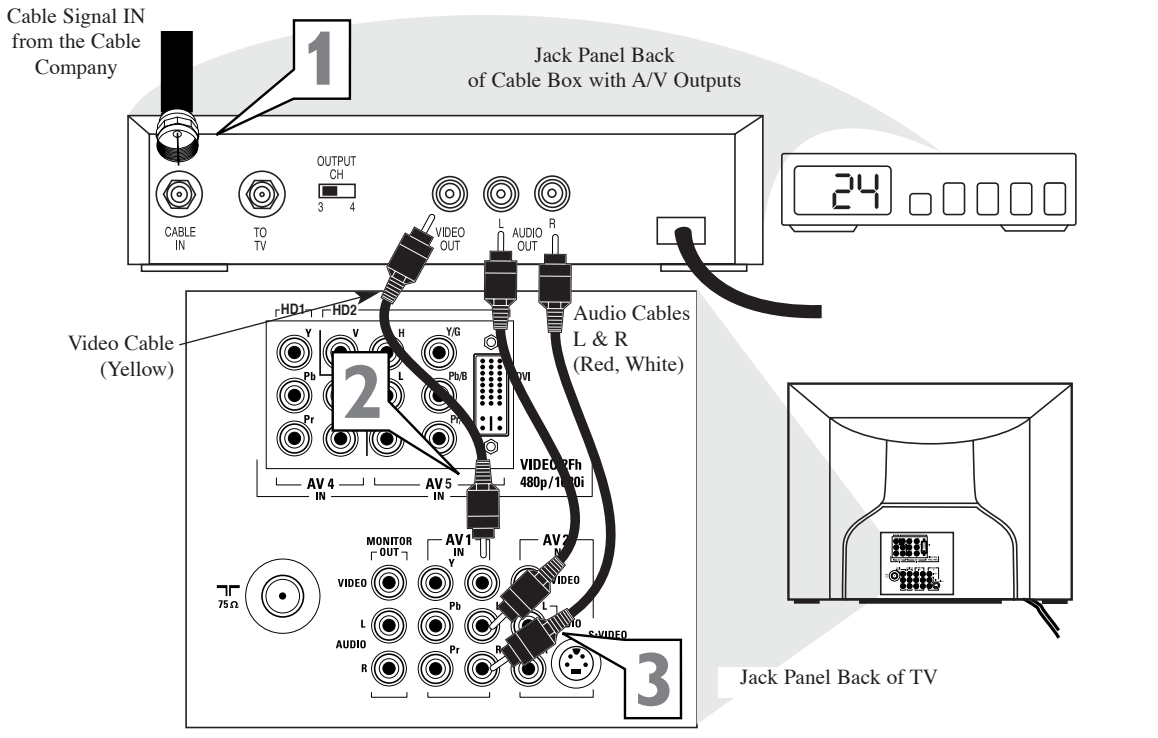


Cable TV Box with A/V Inputs

This connection will supply Stereo sound to the TV.

1. **Connect the open end of the round Cable Company supplied cable** to the cable signal IN(put) plug on the back of the Cable Box.
2. Using a RCA type Video Cable, **connect one end of the cable to the Video** (or ANT, your cable box may be labeled differently) **Out jack** on the cable box and the other end to the AV1 Video Input on the TV.
3. Using a RCA type Audio Left and Right Cable, **connect one end to the left and right Audio Out L & R jacks on the cable box.** Connect the other end to the AV1 Audio L & R Input jacks on the TV.

NOTE: Use the AV button on the TV remote control to tune to the AV1 channel for the cable box signal. Once tuned, change channels at the cable box, not the television. Pressing the AV button repeatedly will scroll all the AV Input channels, including the presently tuned channel.

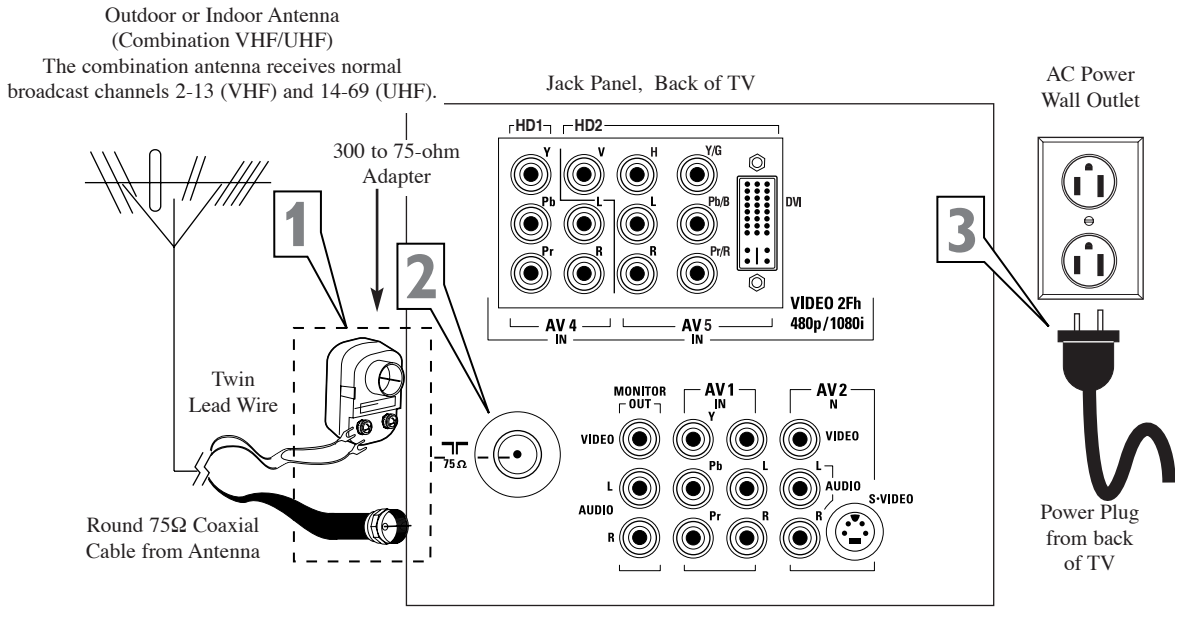


Antenna TV

A combination antenna receives normal broadcast channels (VHF 2–13 and UHF 14–69). Your connection is easy because there is only one 75Ω (ohm) antenna plug on the back of your TV, and that's where the antenna goes.

1. **If your antenna has a round cable** (75 ohm) on the end, then you're ready to connect it to the TV.
   If your antenna has flat, twin-lead wire (300 ohm), you first need to attach the antenna wires to the screws on a 300- to 75-ohm adapter.
2. **Push the round end** of the adapter (or antenna) onto the 75Ω (ohm) plug on the back of the TV. If the round end of the antenna wire is threaded, screw it down finger tight.
3. **Plug the television into the wall outlet** and turn the TV on. Refer to the TUNER and AUTOPROGRAM features on page 4 of this Quick Use Guide. TUNER should be set to the ANTENNA option. AUTOPROGRAM can be set to program all the available channels on your cable signal into the television's memory.

Antenna Connection:

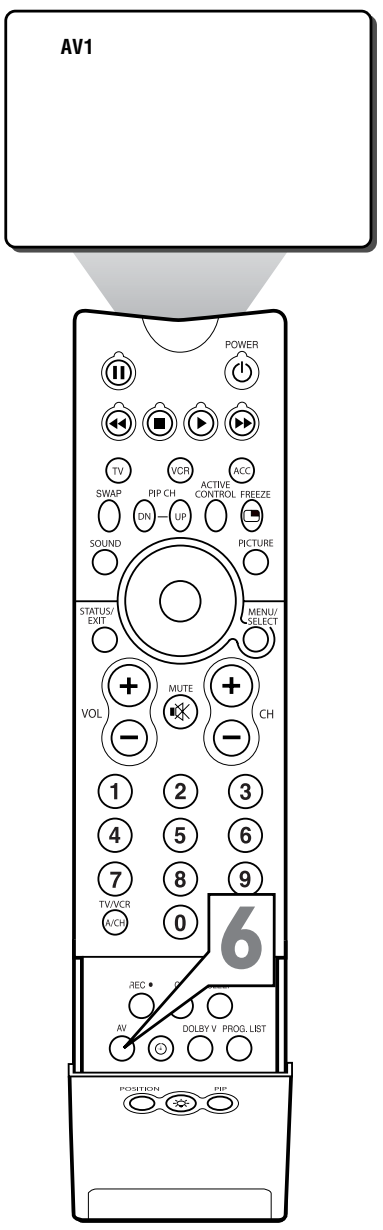

Outdoor or Indoor Antenna (Combination VHF/UHF)
The combination antenna receives normal broadcast channels 2-13 (VHF) and 14-69 (UHF).
Jack Panel, Back of TV
AC Power Wall Outlet
300 to 75-ohm Adapter
1
2
3
Twin Lead Wire
75Ω
Round 75Ω Coaxial Cable from Antenna
Power Plug from back of TV

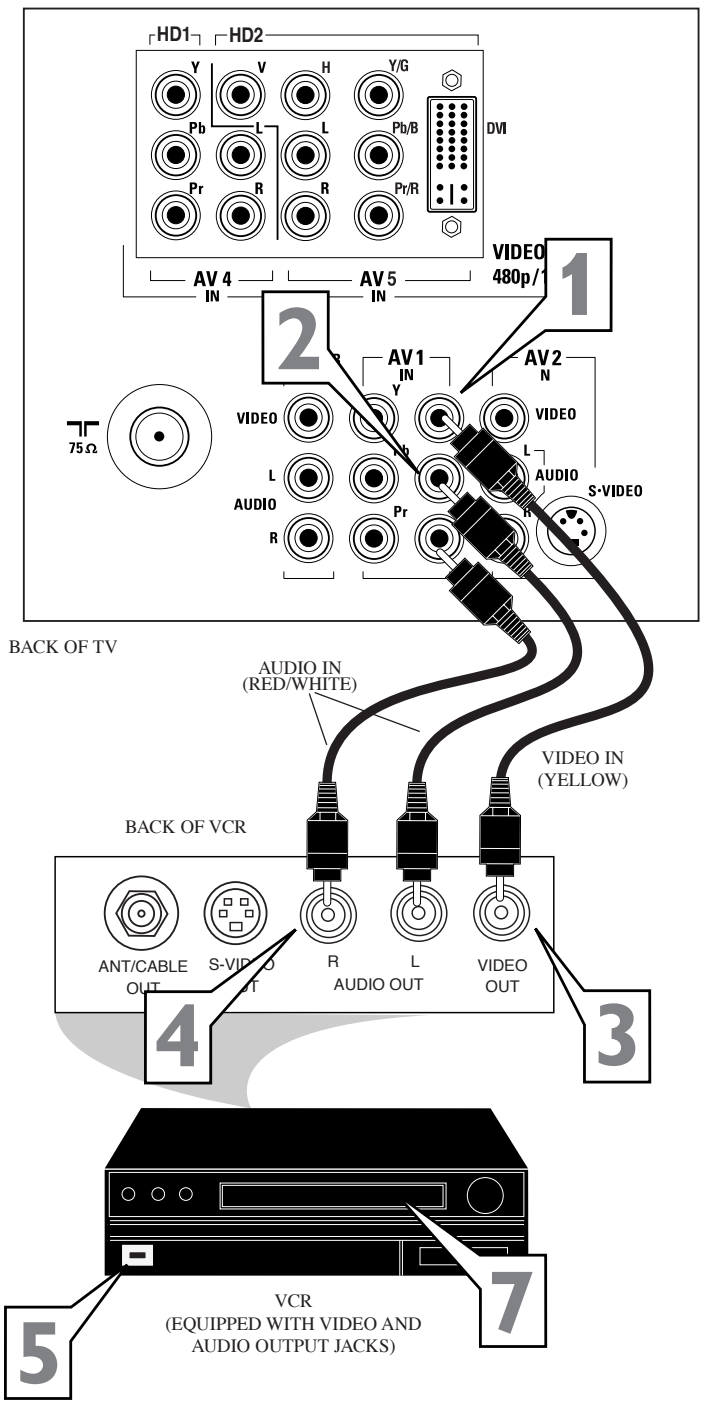
HOOKING UP THE TELEVISION

USING THE AV 1 INPUT JACKS

The TV's audio/video input jacks are for direct picture and sound connections between the TV and a VCR (or similar device) that has audio/video output jacks. Follow the easy steps below to connect your accessory device to the AV 1 Input Jacks located on the back of the TV.

1. **Connect the VIDEO (yellow) cable** to the VIDEO AV1 IN jack on the back of the TV.
2. **Connect the AUDIO (red and white) cables** to the AUDIO (left and right) AV1 IN jacks on the rear of the TV.
3. **Connect the VIDEO (yellow) cable** to the VIDEO OUT jack on the back of the VCR.
4. **Connect the AUDIO (red and white) cables** to the AUDIO (left and right) OUT jacks on the rear of the VCR.
5. **Turn the VCR (accessory device) and the TV ON.**
6. **Press the AV button** on the remote control to tune the AV1 channel.
7. **Insert a prerecorded tape** (or CD, DVD, depending on the type of accessory device being used) and, **press the PLAY button** on the accessory device to view the playback.

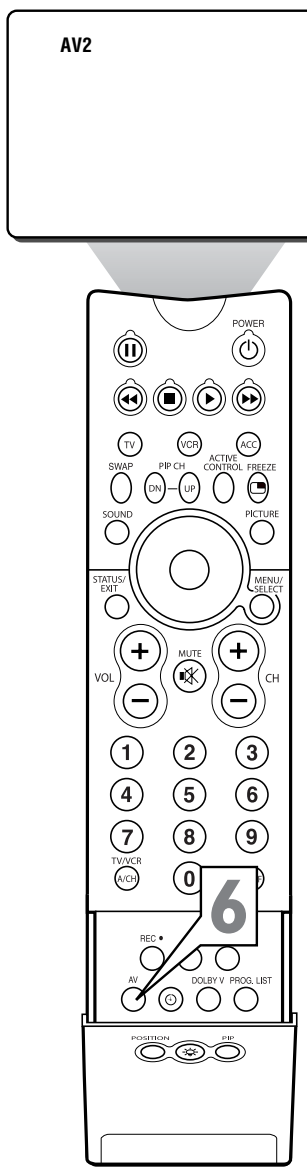


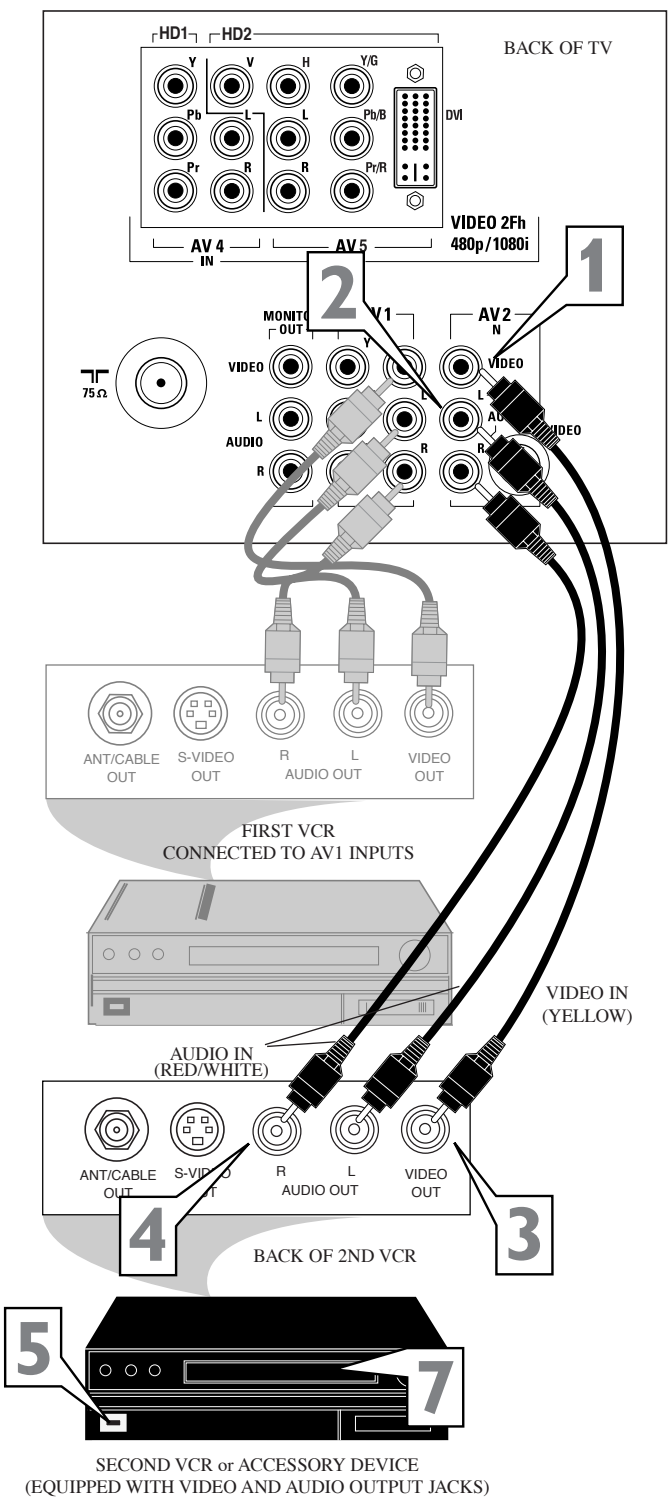


USING THE AV 2 INPUT JACKS

The TV's audio/video input jacks allow you connect multiple accessory devices at one time to different sets of input jacks.. Follow the easy steps below to connect an additional accessory device to the AV 2 Input Jacks located on the back of the TV.

1. **Connect the VIDEO (yellow) cable** to the VIDEO AV2 IN jack on the back of the TV.
2. **Connect the AUDIO (red and white) cables** to the AUDIO (left and right) AV2 IN jacks on the rear of the TV.
3. **Connect the VIDEO (yellow) cable** to the VIDEO OUT jack on the back of the VCR.
4. **Connect the AUDIO (red and white) cables** to the AUDIO (left and right) OUT jacks on the rear of the VCR.
5. **Turn the VCR (accessory device) and the TV ON.**
6. **Press the AV button** on the remote control to tune to the AV2 channel.
7. **Insert a prerecorded tape** (or CD, DVD, depending on the type of accessory device being used) and, **press the PLAY button** on the accessory device to view the playback.





Hooking Up the Television

Using the AV 5 Input Jacks

The AV5 Input Jacks provide High Definition Video Inputs at 1080i or 480p, for accessories like a HD Receiver and Digital DVD Players. There is also a DVI jack supplied allowing encrypted transmission of uncompressed HD content. .

1 **Connect the Component (Y, Pb, Pr) Video OUT** jacks from the HD accessory device to the (Y, Pb, Pr) AV5 IN(put) jacks on the TV. If the device your using is equipped with separate Horizontal and Vertical sync, connect the H and V Outputs on the accessory device to the H and V Inputs of AV5 IN.

2 **Connect the red and white AUDIO CABLES** to the Audio (left and right) output jacks on the rear of the HD accessory device to the Audio (L and R) AV5 IN(put) jacks on the TV.

3 **Connect a DVI cable** from the DVI OUT on the HD accessory device to the AV5 DVI jack on the back of the TV.

4 **Connect a 75Ω round cable** from the OUT TO TV jack on the HD accessory device to the 75Ω IN on the back of the TV.

5 If using a Satellite Dish, Cable signal or Antenna signal, **connect the 75Ω round cable** from a Satellite Dish to the SATELLITE IN and/or the Cable and Antenna signals to the ANTENNA “A” or “B” IN on the back of the HD accessory device.

6 **Press the AV button** on the remote control repeatedly to tune to the AV5 channel.

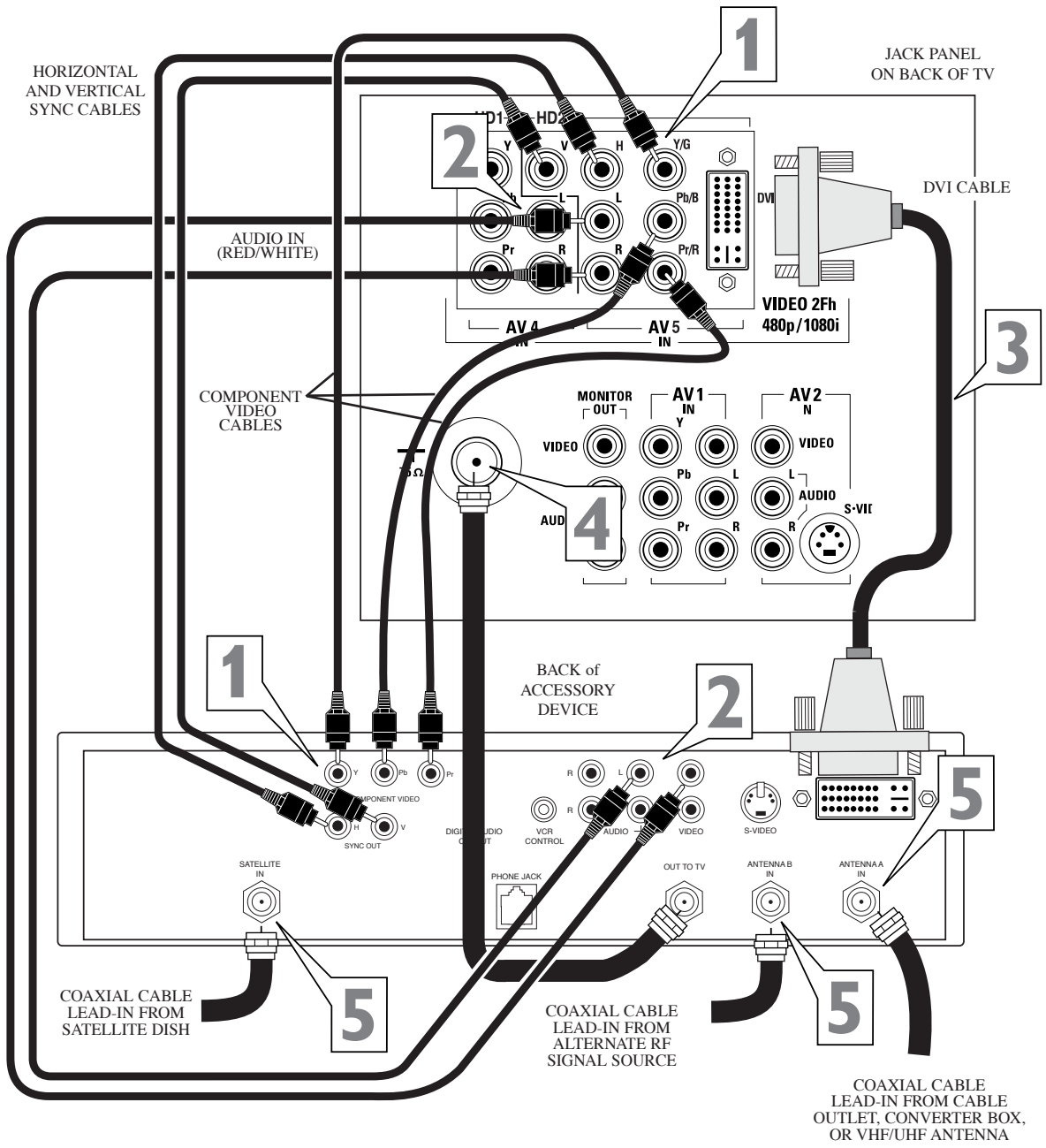
Your now ready to use your digital device to begin playback of high definition quality.

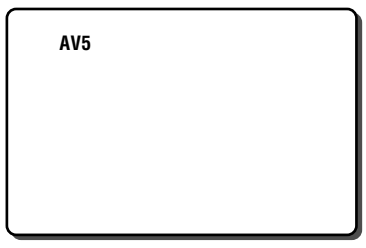
NOTE: This television is designed to accept high definition signals 1080i and 480p as specified by the Electronic Industries Association standard EIA770.3. Digital devices from different manufacturers have the possibility of differing output standards which my cause difficulties for the television to properly display.

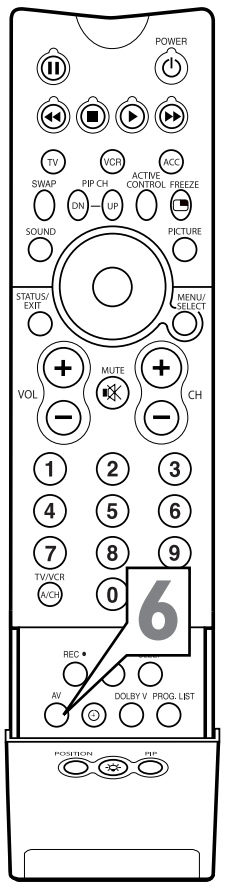
☑ *Check It Out*

DVI - DVI is a specific digital input allowing encrypted transmission of uncompressed HD content. DVI includes HDCP (high-bandwidth digital content protection), which is supported by Hollywood, satellite providers, and most of the consumer electronics industry. DVI is gaining momentum and quickly becoming an industry standard for the consumer to view high-definition material while keeping content protected.
NOTE: The Picture-in-Picture (PIP) feature is not available for use with AV5.

Note: If the AV5 channel is tuned and no signal connection present, the screen could jump or flash.







HOOKING UP THE TELEVISION

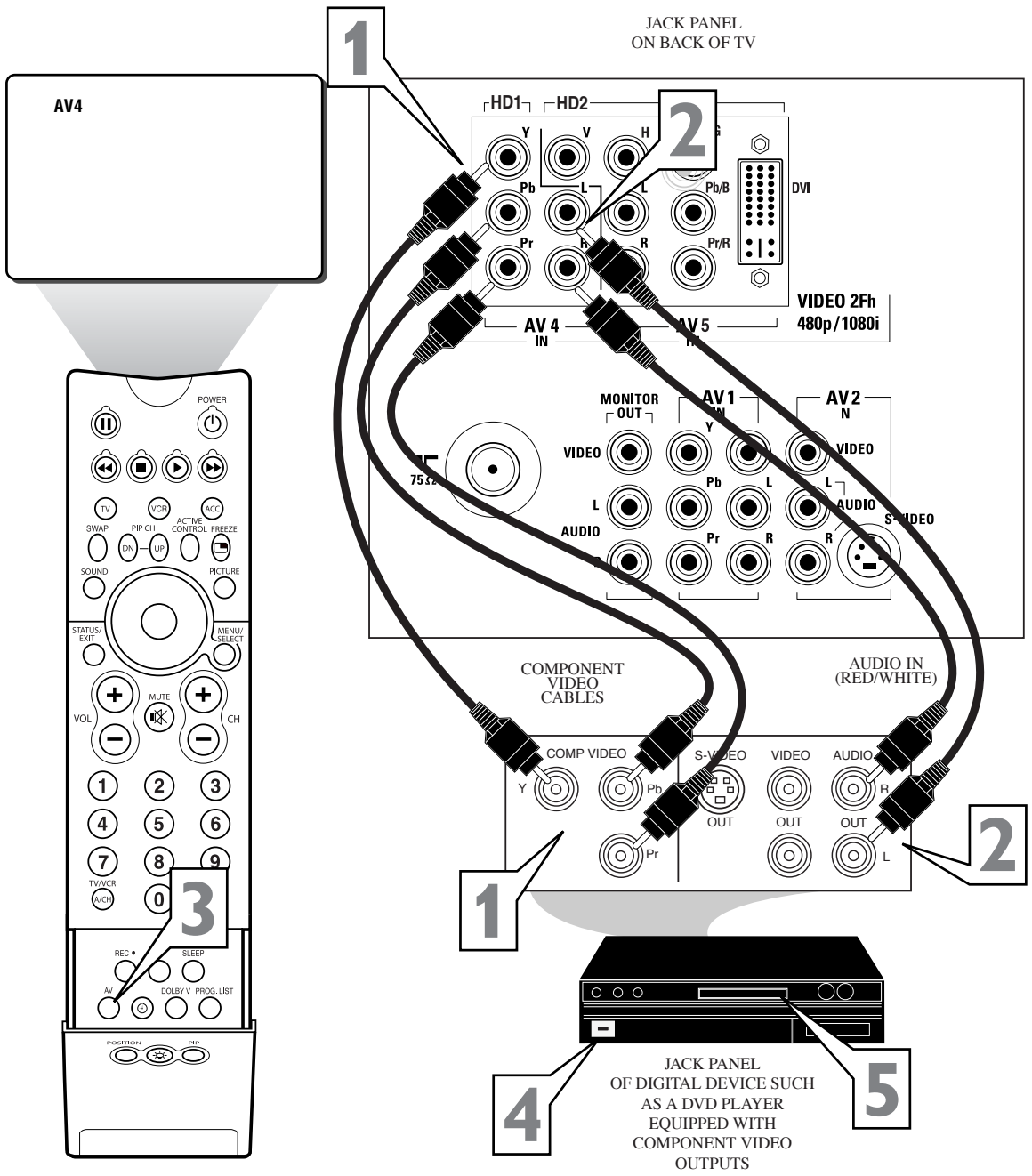
USING THE AV 4 INPUT JACKS

The AV4 Input Jacks provide High Definition Video Inputs at 1080i or 480p, for accessories like a HD Receiver and Digital DVD Players. Using the color difference signals (Pb, Pr) and the luminance (Y) signal will improve color bandwidth information.

1. **Connect the Component (Y, Pb, Pr) Video OUT** jacks from the DVD player (or similar device) to the (Y, Pb, Pr) AV4 IN(put) jacks on the TV.
2. **Connect the red and white AUDIO CABLES** to the AUDIO (left and right) OUT(put) jacks on the rear of the accessory device to the Audio (L and R) AV4 IN(put) jacks on the TV.
3. **Press the AV button** on the remote control repeatedly to tune to the AV4 channel.
4. **Turn the TV and the DVD (or digital accessory device) ON.**
5. **Press the PLAY button** on the DVD (or digital accessory device) to view the program on the television.

NOTE: This television is designed to accept high definition signals 1080i and 480p as specified by the Electronic Industries Association standard EIA770.3. Digital devices from different manufacturers have the possibility of differing output standards which my cause difficulties for the television to properly display.

Note: If the AV4 channel is tuned and no signal connection present, the screen could jump or flash.

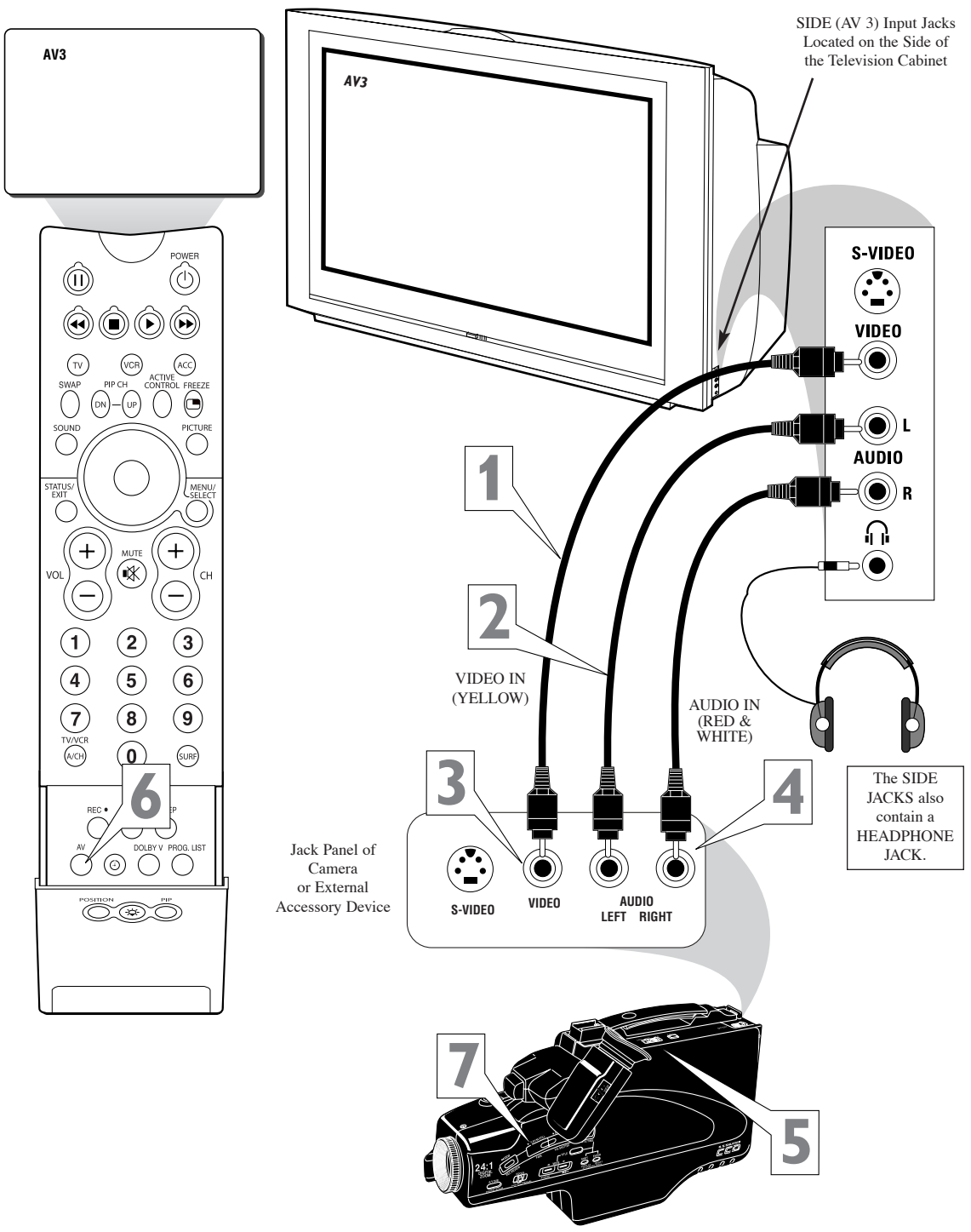


USING THE SIDE AV 3 INPUT JACKS

This television has input jacks conveniently located on the side of the cabinet. These jack are for easy hook-ups (without having to move around to the back of the TV) for cameras, gaming units, and other accessory devices that wouldn't be connected permanently. Follow the easy steps below to connect your accessory device to the SIDE Input Jacks located on the right side of the TV.

1. **Connect the VIDEO (yellow) cable** to the VIDEO IN jack on the side of the TV.
2. **Connect the AUDIO (red and white) cables** to the AUDIO (left and right) IN jacks on the side of the TV.
3. **Connect the VIDEO (yellow) cable** to the VIDEO OUT jack on the back of the camera (or accessory device).
4. **Connect the AUDIO (red and white) cables** to the AUDIO (left and right) OUT jacks on the rear of the camera (or accessory device).
5. **Turn the camera (or accessory device) and the TV ON.**
6. **Press the AV button** on the remote control repeatedly to tune to the AV3 channel.
7. With the camera (or accessory device) ON and a prerecorded tape (or other media depending on type of accessory device being used) inserted, **press the PLAY button** to view the tape on the television.

NOTE: The S-Video Cable can be used in place of the Yellow Video cable shown in this diagram. If your camera or accessory device has a S-Video output jack, connecting the video signal through the S-Video jack will reproduce the video signal with greater quality.



Hooking Up the Television

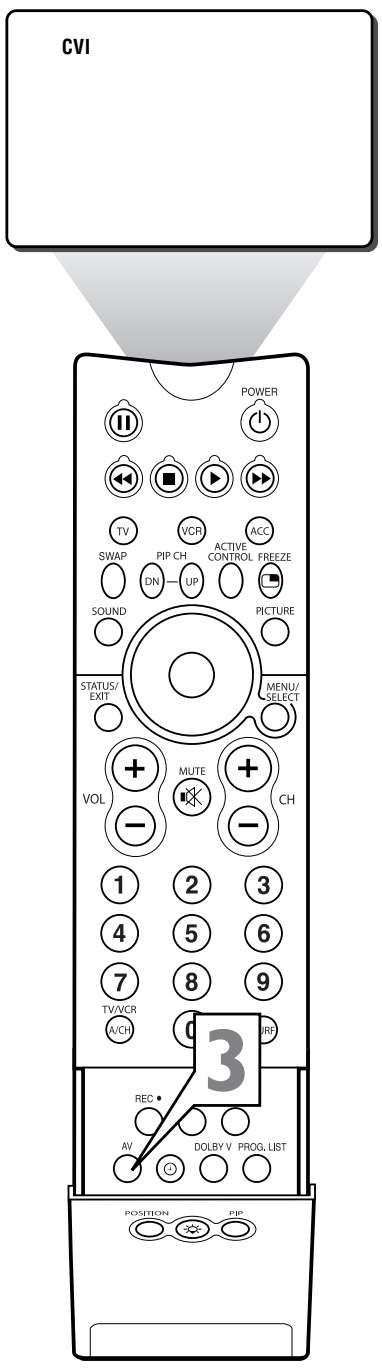
Component Video Input (CV1)

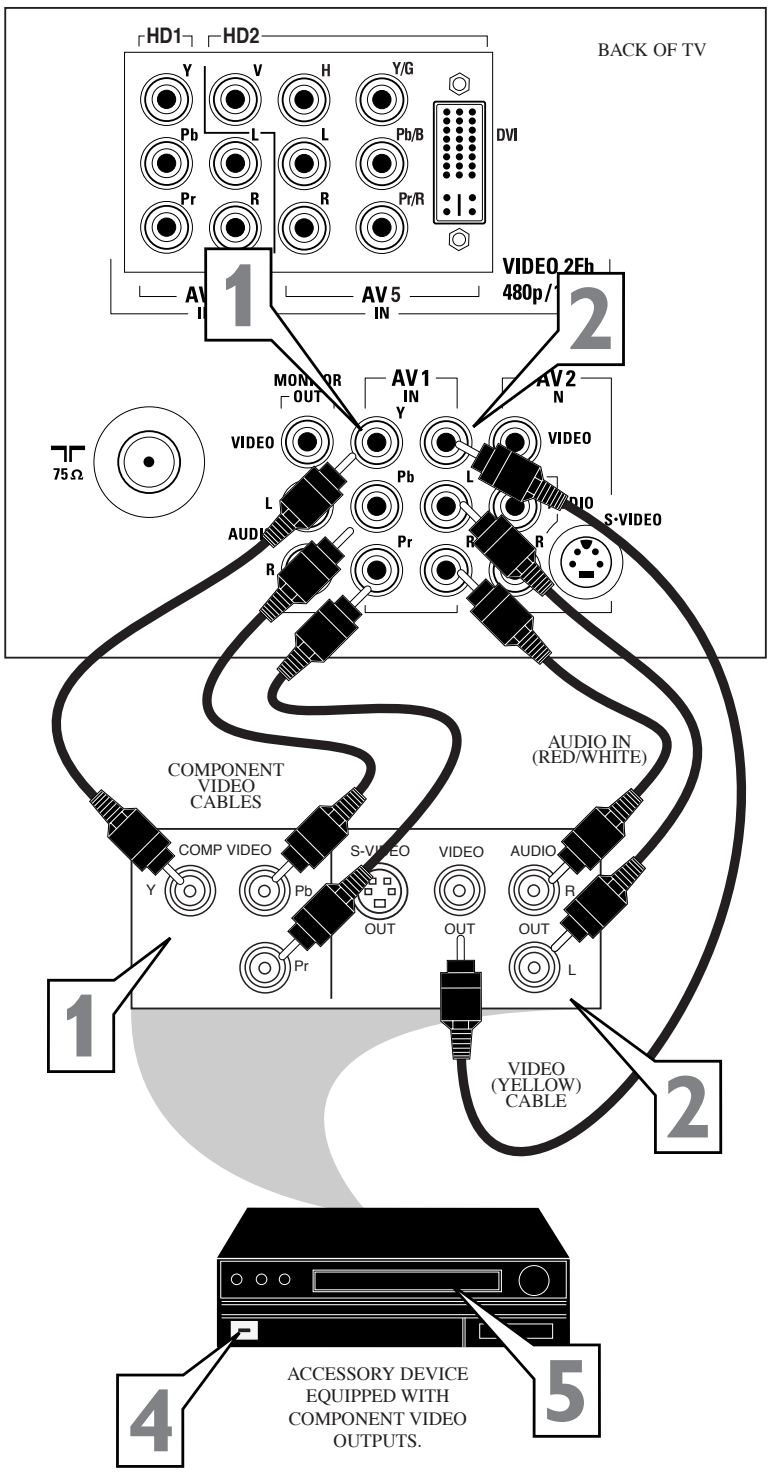
If using an accessory device that is not high definition but uses Component Video jacks. The AV1 jacks on the TV offer the user the possibility of better video reproduction using the Component Video Inputs. The color difference signals (Pb, Pr) and the luminance (Y) signal are connected and received separately, which allows for improved color bandwidth information (not possible when using composite video or S-Video connections).

1. **Connect the Component (Y, Pb, Pr) Video OUT** jacks from the DVD player (or similar device) to the (Y, Pb, Pr) IN(put) jacks on the TV. When using the Component Video Inputs, it is best not to connect a signal to the AV1 Video Input.
2. **Connect the yellow VIDEO CABLE along with the red and white AUDIO CABLES** to the AUDIO (left and right) OUT(put) jacks on the rear of the accessory device to the AV1 VIDEO and AUDIO IN(put) jacks on the TV.
3. **Press the AV button** on the remote control repeatedly to tune to the CVI channel.
4. **Turn the TV and the DVD (or digital accessory device) ON.**
5. Insert a DVD disc into the DVD player and **press the PLAY ▶ button on the DVD Player (or digital accessory device).**

Helpful Hint

The description for the component video connectors may differ depending on the DVD player or accessory digital source equipment used (for example, Y, Pb, Pr; Y, B-Y, R-Y; Y, Cr, Cb). Although abbreviations and terms may vary, the letters *b* and *r* stand for the blue and red color component signal connectors, and *Y* indicates the luminance signal. Refer to your DVD or digital accessory owner's manual for definitions and connection details.





S-Video Input

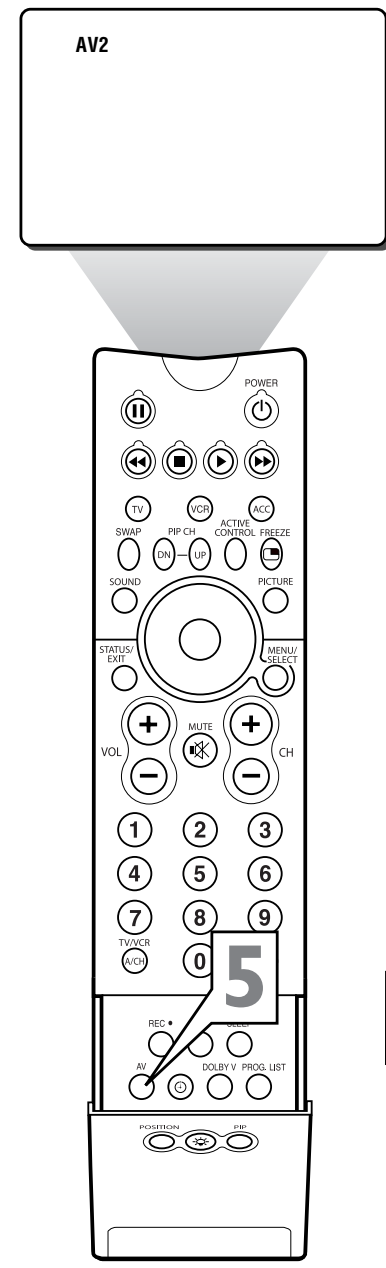
The S(uper)-Video connection on the rear of the TV can provide you with better picture detail and clarity for the playback of accessory sources such as DBS (digital broadcast satellite), DVD (digital video discs), video games, and S-VHS VCR (video cassette recorder) tapes than the normal antenna picture connections.

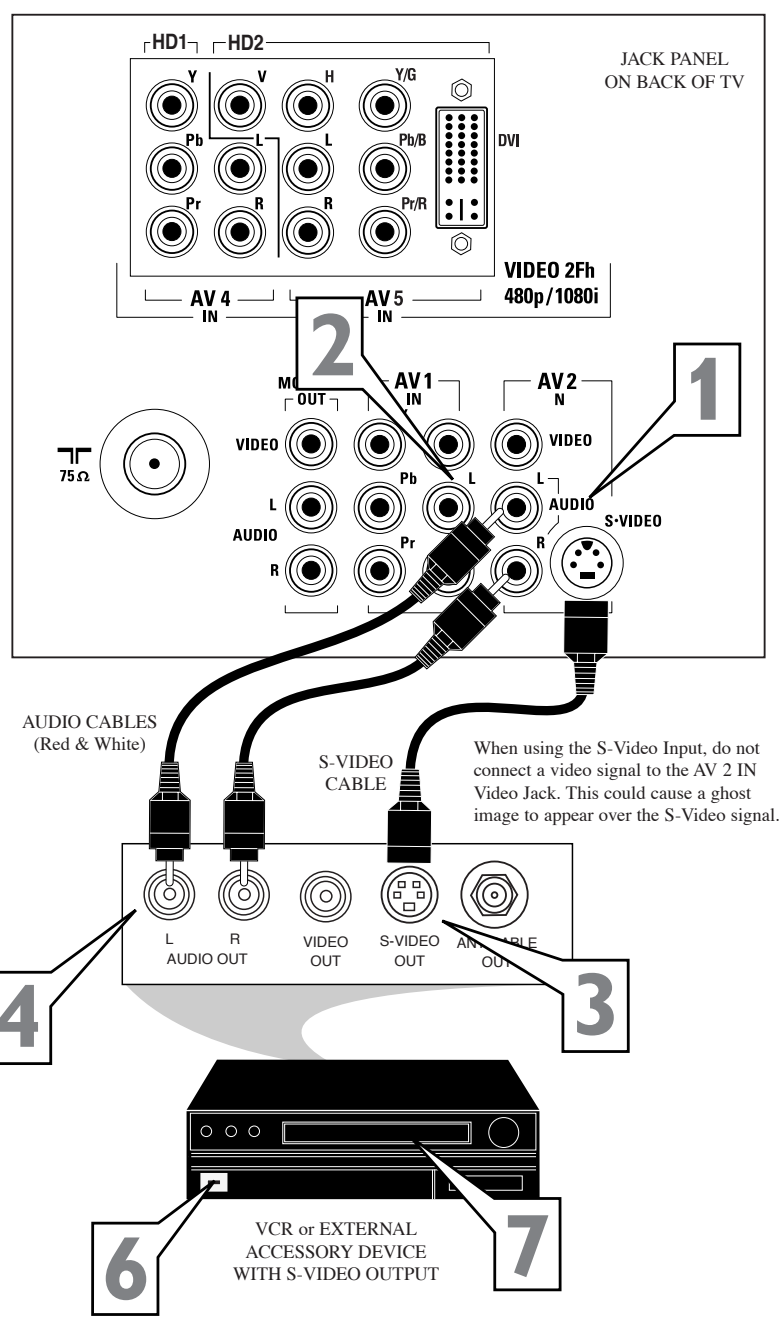
***NOTE:** The accessory device must have an S-VIDEO OUT(put) jack in order for you to complete the connection on this page.*

1. **Connect the S-VIDEO CABLE** to the S-VIDEO input jack on the rear of the television.
2. **Connect the AUDIO (red and white) cables** to the AUDIO AV2 IN jacks on the rear of the TV.
3. **Connect the S-VIDEO CABLE** to the S-VIDEO OUT(put) jack on the accessory device.
4. **Connect the red and white AUDIO cables** to the AUDIO (left and right) OUT(put) jacks on the rear of the accessory device.
5. **Press the AV button** on the remote control repeatedly to tune the AV2 channel. The S-Video Input is dominate over the AV2 Video Input.
6. **Turn the VCR, DVD or other accessory device ON.**
7. With the VCR (or accessory device) ON and a prerecorded tape inserted, **press the PLAY button** to view the tape on the television.

☑ *Check It Out*

The S-Video jack and the AV 2 jacks work together. When a device is connected to the S-Video jack, do not connect a signal to the AV 2 IN Video jack. This could cause an over-lapping of two video images on the TV screen.





Hooking UP the Television

Monitor Output Jacks Second VCR for Recording

The Audio/Video (Monitor) Output jacks can be used for recording a selected TV (Antenna Input/tuner signal source) Channel. This recording can even be completed while viewing another external Audio/Video Source Select option. (For example: DVD program playback shown through the A/V 1 or 2 Input source connection.)

NOTE: Refer to page 4 for the proper hookup of an accessory device to the AV 1 IN(put) jacks. Follow the instructions on how to tune to the AV 1 channel to view a DVD program playback or pre-recorded VCR tape.

The following steps allow you to connect a VCR to record a selected TV channel program through the Monitor Outputs.

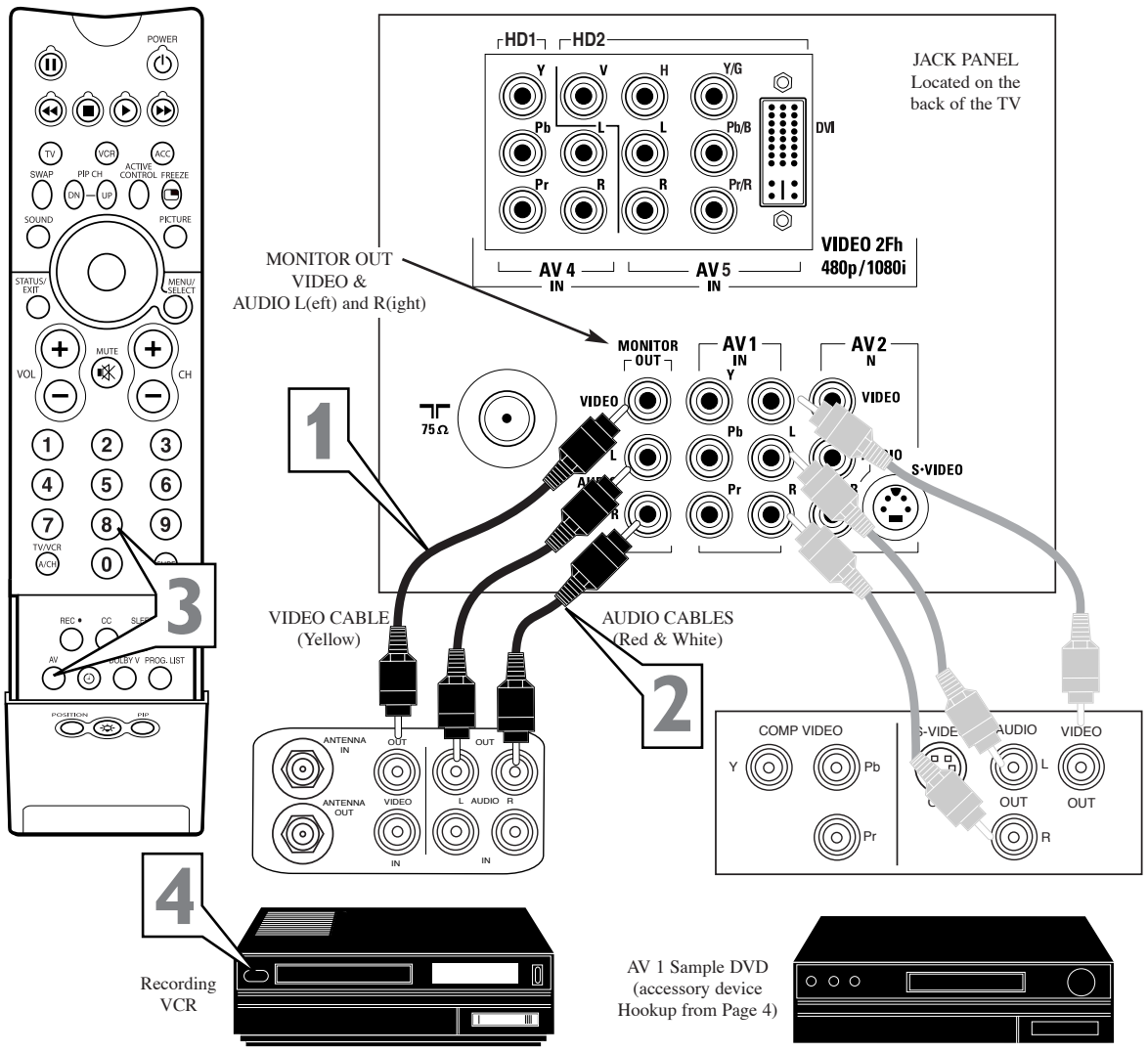
1. **Connect one end of the yellow Video Cable** to the Monitor Out VIDEO plug. Connect the other end to the VIDEO IN plug on the VCR.

2. **Connect one end of the red and white Audio cable** from the Monitor Out AUDIO L and R plugs on the TV to the AUDIO IN plugs on the VCR.

3. **Tune the TV to the program** channel you wish to record by **pressing the AV or NUMBERED buttons.**

   Note: Once selected be sure to leave the TV channel tuned to the desired program until the complete recording is finished.

4. **Turn the recording VCR ON,** insert a blank VHS tape and it's ready to record the channel program you selected previously in step #3.



Monitor Output Jacks External Audio System

The Audio Output jacks are great for connecting to an external audio system or a set of external speakers. This will enhance the sound coming from the television to improve your viewing and listening experience.

For Audio System Connection:

1. **Connect one end of the R(ight) and L(eft) Audio Cables (red and white)** to the AUDIO OUT (Left and Right) jacks on the television.

2. **Connect the other ends of the R(ight) and L(eft) Audio Cables (red and white)** to the Audio Left and Right Input jacks on the external Audio System.

3. **Turn the Audio System and the TV on.** Adjust the volume coming from the Audio System to a pleasant listening level.

4. You can now adjust the sound level coming from the audio system by **pressing the VOLUME (+) or (–) button** on the TV or remote control.